

Hartopp and Lannoy Point

Housing and Homelessness Policy and Accountability Committee Presentation

March 2023



### The Hartopp and Lannoy Point Project



The Bedford Arms 2 // BPTW // LBHF Housing and Homelessness Committee Presentation



(A) View of the previous towers on site



Image: Aerial view of the site

Address: Dawes Road, London, SW6 7RQ



### History and demolition of existing towers

Hammersmith and Fulham Council demolished the Hartopp and Lannoy tower blocks on the advice of structural experts following extensive and intrusive surveys

These highlighted serious concerns around structural integrity and fire safety.

Following resident consultation in early 2019, the Cabinet approved the demolition of the tower blocks. By February 2020, all 91 existing tenants were rehoused and 21 leasehold homes were acquired.

Demolition of the blocks started on site in May 2020 and was completed in <sup>3</sup>// BPTW // LBHF Housing and Homelessness Committee Presentation February 2021.





View looking down Mendora Road during demolition



Current view looking towards Donelly Court





Current view looking down Pellant Road

Image Key



## Co-production with the Resident's Steering Group

H&F have made a Council-wide commitment to 'do things with residents, not to them'.

In January 2021, H&F adopted a Defend Council Homes policy (DCHP), which ensures residents are fully involved from the outset in any development of the land that is likely to affect their homes.

In March 2021, as part of the Hartopp and Lannoy Project Engagement Strategy, a Resident's Steering Group was formed.

Former residents of Hartopp and Lannoy Points and existing residents of the wider Aintree Estate were invited to join.

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Image: The Residents Steering Group is made up of existing residents of the Aintree Estate



Image: A mark-up produced during the Public Consultation



### Design Timeline





#### Designing for better homes - First Principles

Dialogue with the RSG and planning authority defined the limitations for building height and expanse towards the edges of the site

Two residential blocks will occupy the northern and southern areas of the site. A central open space links the blocks and improves site permeability

Locating the tallest elements in the centre appropriately distributes the massing across the site and has the least impact on the surrounding streets

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Prioritises dual-aspect dwellings -72% of all dwellings are dual-aspect



1. Analysis of the existing site layout



3. Considerations of site access and maximising pedestrain-only use



2. Site levels determing the interaction with the areas



be utilised

4. Combination of all the considerations begin to shape how the areas of the site should



### Designing for better homes - Massing

The RSG expressed a desire for the scheme to not return to the height and form of the previous tower blocks

The RSG wanted a unified approach to the site masterplan. Whereby the existing buildings sat as equals alongside the new buildings

A central hub to form a Community Heart for all residents; 'new' and 'existing'

By stepping down the massings on the perimeter, more daylight is able to reach the existing houses on the surrounding streets Presentation



Image: Aerial view of the proposed H&L project



1. Two distinct buildings



3. Shaping the Block B interaction with Pellant Road to retain the existing trees.



2. Carving the massing to create courtyards and allow more South-facing aspects



4. Mould the massings to respond to the existing context. The tall element of the site will be positioned in the site's centre.



## Designing for better homes - Inclusive Design Strategy

H&F is committed to inclusive design and its planning policy refers to the requirement of the project to be 'ruthlessly inclusive'.

H&F's commitment to co-production in the context of housing development and design is echoed in the recently developed Disabled People's Housing Strategy

Inclusive design is central to the policies of the recently published London Plan

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> To strengthen the level of input from local disabled people, the project team have consulted with H&F's Disability Forum Planning Group at early and detailed design stages



Image: Extract from 'Nothing About Disabled People Without **Disabled People' Report** 





Image: H&F's Disabled People's Housing Strategy 2021



### Designing for better homes - Community Heart

The RSG expressed their desire for a fully accessible pedestrian zone. Vehicular access and movement maintained as a minimum and around the periphery of the site



(Top) Image: Sketch produced with the RSG

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(Below) Image: The scheme plans to retain the healthy existing trees as well as introduce new green space in the centre of the site



Image: Ground Floor plan with site landscaping strategy





# Hartopp & Lannoy Point

Sustainability Strategy



#### www.calfordseaden.com

# Climate & Ecology Strategy

#### Hammersmith & Fulham Council's Targets

- Climate and Ecology Strategy and Action Plan
- Net Zero Carbon by 2030 for the Borough •
- Eliminate emissions from homes, buildings, travel and things we • use
- Protect people and nature through ecology and adapting to climate change
- Enable this through engagement and influence, finance and • decision-making, and growing the green economy





Eliminate our emissions from:



Protect people and nature by:



Enable this by:



# 'Benefits' and 'Values' of Net Zero





# Sustainability Framework

#### Reducing Running Costs through Passive Design

- The proposals have met the requirements outlined in the National, Regional and Local Planning Policies
- The proposed strategy applies the energy hierarchy and fabric first approach to reduce space heating demand and running costs
- Passivhaus principles have been applied, with well-insulated and airtight construction, heat recovery ventilation systems, low carbon space heating and hot water
- Optimised roof space for solar Photovoltaic (PV) array
- Embodied Carbon has also been assessed









Source: Greater London Authority



# **Passivhaus Principles**

#### Low Energy Design

- Applies fabric first approach to its full extent to reduce the space heating demand
- Uses passive measures before active design, i.e. insulation before heating
- Low energy design included in all services: heating, hot water, ventilation, lighting, cooking and appliances
- Rigorous testing through the design and construction to ensure the building will perform as designed

# Space heating demand describes the amount of heat required to heat a home to a particular heating profile for a given set of weather conditions





# Passivhaus Principles – Fabric Enhancements

#### **Energy Efficient Design**

- Simple shape = lower Form Heat Loss Factor, reducing difficult detailing and thermal bridging
- Enhanced glazing strategy to optimise daylight levels • and reduce heat loss and summertime solar gains
- Deep reveals and strategically positioned to provide • sufficient daylighting levels and optimise solar gains during winter months, whilst offering local shading during summer months





# Passivhaus Principles – Fabric Enhancements

### **Energy Efficient Design**

- Well insulated and air tight building envelope
  - Triple glazed windows
  - Air tightness of 0.60ach (@50Pa)
- Smaller windows, minimising full height glazing allows windows to be insulated at all junctions reducing heat loss from thermal bridging
- Majority of dwellings are dual aspect to provide cross ventilation
- Externally supported balconies/shading elements to reduce cold bridging





# Passivhaus Principles – Ventilation

#### Mechanical Ventilation with Heat Recovery (MVHR)

- Extracts warm stale air from kitchen and wet rooms and supplies fresh air to habitable rooms (living room & bedrooms)
- Recovers heat from extracted air and supplies back into the dwelling reducing the space heating demand and running costs
- Passivhaus certified unit rigorous testing
- Provides healthy indoor air quality filters applied to supplied air
- Reduces risk of mould growth
- Reduces risk of summer overheating tested to 2050s climate scenario
- Efficient design located close to the external wall with insulated ductwork
- Maintenance includes filter replacement on the intake and extract side of the plate heat exchanger





# Passivhaus Principles – Heating & Hot Water

### Air Source Heat Pumps (ASHP)

- Produces heat from ambient air
- Higher efficiency compared to direct electricity CoP 2.5
- Low Temperature Heat Network
- Vertical risers to serve 1-2 dwellings to reduce horizontal pipework runs in ceiling voids
- ASHPs located adjacent to plant room at roof level to reduce pipework lengths and loses
- Heat network designed to CIBSE Code of Practice for Heat Networks (CP1)
- Each home will have individual heat meters to allow occupants to be charged based on their usage





# Passivhaus Principles – Renewable Energy

### Solar Photovoltaic (PV) Array

- Maximised across the roofs
- Connected to landlord's supply to help offset grid electricity used for the heat pumps







### Sustainability & Passivhaus Design Principles

A breakdown how the Passivhaus design principles have influenced the form and shape of the design.





### Sustainability & Passivhaus Design Principles



Balancing sustainability principles and design considerations: The fifth storey on Pellant Road is set back to create a better balanced relationship with the existing houses



Flower-rich perennial planting and

Location of rain water storage tank for rain water harvesting, to clean the PV



Plant room to be located close to the ASHP's, reducing distribution losses

Chamfered balconies increases light into living spaces



## Fly-through





Aerial view of the Hartopp and Lannoy Project





Street view from Dawes Road





Street view from Pellant Road







### **Project Summary**



134 New Homes



84% Affordable Homes



High Proportion Family Homes



**Co-Production Design Process** 



Improved Green Space



Passivhaus-led Design



Phase

New Jobs During Construction





Attractive Buildings Utilising Existing Under-Utilised Spaces



Promotes Sustainable Travel





### Summer 2025

